Claims

What is claimed is:

1.   A method of facilitating allocation of resources in a heterogeneous computing environment, said method comprising:

obtaining, by a resource manager of the heterogeneous computing environment, one or more attributes relating to one or more nodes coupled to the resource manager, said one or more attributes specifying at least one compatible environment supported by the one or more nodes; and

taking into consideration, by the resource manager, at least one attribute of the one or more attributes in allocating one or more resources of at least one node of the one or more nodes to a request.

2.   The method of claim 1, wherein the at least one compatible environment comprises at least one non-native environment.

3.   The method of claim 1, wherein the taking into consideration comprises considering at least one node that has a native environment different from an environment indicated by the request but is able to support the environment indicated by the request.

4.   The method of claim 1, further comprising receiving by the resource manager the request, said request indicating an environment in which the request is to be processed, and wherein the at least one node having the one or more resources to be allocated is able to support that environment, as indicated by at least one attribute of the at least one node, although that environment is not a native environment of the at least one node.

5.   The method of claim 4, wherein the request comprises a program to be executed.

6. The method of claim 1, wherein the obtaining comprises providing by the one or more nodes the one or more attributes to the resource manager.

7. The method of claim 6, wherein the providing of the one or more attributes by the one or more nodes to the resource manager is via one or more other resource managers coupled to the one or more nodes.

8. The method of claim 7, wherein the resource manager is a grid resource manager, and the one or more other resource managers comprise one or more cluster resource managers.

9. The method of claim 1, wherein the heterogeneous computing environment comprises a grid computing environment and said resource manager comprises a grid resource manager.

10.   A system of facilitating allocation of resources in a heterogeneous computing environment, said system comprising:

means for obtaining, by a resource manager of the heterogeneous computing environment, one or more attributes relating to one or more nodes coupled to the resource manager, said one or more attributes specifying at least one compatible environment supported by the one or more nodes; and

means for taking into consideration, by the resource manager, at least one attribute of the one or more attributes in allocating one or more resources of at least one node of the one or more nodes to a request.

11.   The system of claim 10, wherein the at least one compatible environment comprises at least one non-native environment.

12.   The system of claim 10, wherein the means for taking into consideration considers at least one node that has a native environment different from an environment indicated by the request but is able to support the environment indicated by the request.

13.   The system of claim 10, further comprising means for receiving by the resource manager the request, said request indicating an environment in which the request is to be processed, and wherein the at least one node having the one or more resources to be allocated is able to support that environment, as indicated by at least one attribute of the at least one node, although that environment is not a native environment of the at least one node.

14.   The system of claim 13, wherein the request comprises a program to be executed.

15.   The system of claim 10, wherein the means for obtaining comprises means for providing by the one or more nodes the one or more attributes to the resource manager.

16.   The system of claim 15, wherein the means for providing of the one or more attributes by the one or more nodes to the resource manager is via one or more other resource managers coupled to the one or more nodes.   .

17.   The system of claim 16, wherein the resource manager is a grid resource manager, and the one or more other resource managers comprise one or more cluster resource managers.

18.   The system of claim 10, wherein the heterogeneous computing environment comprises a grid computing environment and said resource manager comprises a grid resource manager.

19.   A system of facilitating allocation of resources in a heterogeneous computing environment, said system comprising:

a resource manager of the heterogeneous computing environment to obtain one or more attributes relating to one or more nodes coupled to the resource manager, said one or more attributes specifying at least one compatible environment supported by the one or more nodes; and

the resource manager to take into consideration at least one attribute of the one or more attributes in allocating one or more resources of at least one node of the one or more nodes to a request.

20.   An article of manufacture comprising:

at least one computer usable medium having computer readable program code logic to facilitate allocation of resources in a heterogeneous computing environment, the computer readable program code logic comprising:

obtain logic to obtain, by a resource manager of the heterogeneous computing environment, one or more attributes relating to one or more nodes coupled to the resource manager, said one or more attributes specifying at least one compatible environment supported by the one or more nodes; and

consideration logic to take into consideration, by the resource manager, at least one attribute of the one or more attributes in allocating one or more resources of at least one node of the one or more nodes to a request.

21.   The article of manufacture of claim 20, wherein the at least one compatible environment comprises at least one non-native environment.

22.   The article of manufacture claim 20, wherein the consideration logic comprises considering at least one node that has a native environment different from an environment indicated by the request but is able to support the environment indicated by the request.

23.   The article of manufacture claim 20, further comprising receive logic to receive by the resource manager the request, said request indicating an environment in which the request is to be processed, and wherein the at least one node having the one or more resources to be allocated is able to support that environment, as indicated by at least one attribute of the at least one node, although that environment is not a native environment of the at least one node.

24. The article of manufacture claim 23, wherein the request comprises a program to be executed.

25. The article of manufacture claim 20, wherein the obtain logic comprises provide logic to provide by the one or more nodes the one or more attributes to the resource manager.

26. The article of manufacture claim 25, wherein the providing of the one or more attributes by the one or more nodes to the resource manager is via one or more other resource managers coupled to the one or more nodes.

27. The article of manufacture claim 26, wherein the resource manager is a grid resource manager, and the one or more other resource managers comprise one or more cluster resource managers.

28. The article of manufacture claim 20, wherein the heterogeneous computing environment comprises a grid computing environment and said resource manager comprises a grid resource manager.

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